

## School of Arts, Science and Commerce Department of Science B.Sc. PCM Semester IV

## Major Assignment

## **Important Instructions to Student:**

- 1. Last date for Assignment Submission **30-May-2020**
- 2. This assignment carries major **weightage of 50 Marks**. Kindly prepare it very carefully and in a very detailed manner. For any help in this regard, kindly contact your faculties.
- 3. Front Page of Assignment should clearly include details like:
  - **a.** Your Name
  - **b.** UID Number
  - c. Subject
  - d. Class
  - e. Semester
  - In the event of no such information, we may not be able to assign marks for your assignment, for which responsibility lies with students.
- 4. You can write and submit assignment through any of the following options:
  - a. Handwritten Assignment Prepare softcopy of your assignment through suitable apps and send the assignment as one PDF to your respective faculty as mentioned above.
  - b. Typed Assignment Prepare Assignment with following font setting and submit the assignment to your respective faculty as mentioned above.
    - i. Font Type Times New Roman or Arial
    - ii. Headings Font Size 14
    - iii. Text (Except Heading) 12
    - iv. Normal Margin and Line Spacing maximum 1.15
- 5. After this lockdown ends, you all have to submit the physical assignment copies to your respective Faculties. So, keep the assignment carefully for submission.
- While submitting assignment through email, kindly use subject line as Name of the Programe\_Name of Course/Branch\_Semester\_Name o the the Subject. For Example B.Tech.\_Mechanical\_IV\_Theory of Machines



English Communication and		Mode of Submission	
Life Skills – IV		Email – <u>rbs.raiuniversity@gmail.com</u>	
Prof.	Rakhi Pandey	Subject Line: B.Sc. PCM_IV_ECLS-IV	
1.	Explain All Forms Of Tenses In Detail.		
2.	Explain 4 Stages Of Team B	uilding In Detail.	
3	Explain The Following Interview:		
	Panel interview		
	Group interview		
	Stress interview		
	Exit interview		
	Technical interview		
4	Explain the Parts Of Speech	In Detail.	
5.	Explain The All Degree form	ns Of In Detail.	
ELE	CTROMAGNETISM,	Mode of Submission : (Email or whats app)	
ELECTRONICS AND		Email – gayatri.sharma@raiuniversity.edu	
PLASMA PHYSICS		Subject Line: B.Sc. PCM_IV_ ELECTROMAGNETISM AND	
Prof: Gayatri Sha		PLASMA PHYSICS	
1.	If 3 point charges $+Q_1$ , $-Q_2$	$Q_2$ , + $Q_3$ are situated in straight line . find $F_1$ , $F_2$ , $F_3$	
2.	Write output of any three	digital circuits.	
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	b) Compton Effect				
	Black Body Radiation				
ORG	ANIC CHEMISTRY	Mode of Submission: Email			
Prof:	Ravi Prajapati	Email: <u>ravi.prajapati@raiuniversity.edu</u>			
		Subject Line: B.Sc. Sem- IV (Organic chemistry)			
1.	How can we say that any compound is aromatic? Explain with example.				
2.	Explain the mechanism of	Nucleophilic substitution.			
3.	Write difference between	$SN^1$ and $SN^2$ mechenisam			
4.	Discuss the mechanism, orientation and evidences of E2 reaction mechanism.				
5.	Explain Baeyer strain theory.				
ANA	LYTICAL				
CHE	MISTRY	Mode of Submission: email			
Prof:	Nareshvari chovatiya	Email: <u>nareshvari.chovatiya@raiuniversity.edu</u>			
		Subject Line: B.Sc Sem-IV (Analytical chemistry)			
1	Evalain in datail the princi	alo of AAC and its instrumentation			
1.	Explain in detail the princi	pie of AAS and its instrumentation.			
<i>2</i> .	Explain in detail types of a	Cive the Classification of characterization has a comparation			
з.	what is chromatography?	Give the Classification of chromatography based on separation			
	Cive the instrumentation of	fDACE and ACE			
4.	Give the instrumentation of	DI PAGE and AGE.			
5.	Describe the Mathematical Equation for Beer – Lambert's Law.				
DIFL	TEDENITIAI	Mode of Submission: Email			
DIFF	TERENTIAL	Mode of Submission: Email			
DIFF EQU Prof:	TERENTIAL ATION Vardan Parmar	Mode of Submission: Email Email: <u>vardan.parmar@raiuniversity.edu</u> Subject Line: B Sc. SEM IV Differential equation			
DIFF EQU Prof:	<b>TERENTIAL</b> ATION Vardan Parmar	Mode of Submission: Email Email: <u>vardan.parmar@raiuniversity.edu</u> <b>Subject Line:</b> B.Sc. SEM IV Differnetial equation			
DIFF EQU Prof: 1.	<b>TERENTIAL</b> ATION Vardan Parmar Solve differential equation (	Mode of Submission: Email Email: <u>vardan.parmar@raiuniversity.edu</u> Subject Line: B.Sc. SEM IV Differnetial equation $y + \sqrt{x^2 + y^2} dx - xdy = 0$			
DIFF EQU Prof: 1. 2	<b>ERENTIAL</b> ATION Vardan Parmar Solve differential equation ( Solve differential equation (	Mode of Submission: Email Email: <u>vardan.parmar@raiuniversity.edu</u> Subject Line: B.Sc. SEM IV Differnetial equation $y + \sqrt{x^2 + y^2} dx - xdy = 0$ 2x + y - 3)dy = (x + 2y - 3)dx.			
DIFF EQU Prof: 1. 2 3.	<b>ERENTIAL</b> ATION Vardan Parmar Solve differential equation ( Solve differential equation (	Mode of Submission: Email Email: <u>vardan.parmar@raiuniversity.edu</u> <b>Subject Line:</b> B.Sc. SEM IV Differnetial equation $y + \sqrt{x^2 + y^2} dx - xdy = 0$ 2x + y - 3)dy = (x + 2y - 3)dx. x + y)(dx - dy) = dx + dy.			
<b>DIFF</b> EQU Prof: 1. 2 3. 4.	<b>ERENTIAL</b> <b>ATION</b> <b>Vardan Parmar</b> Solve differential equation ( Solve differential equation ( Solve differential equation ( Find a Basic of sulution for the second	Mode of Submission: Email Email: <u>vardan.parmar@raiuniversity.edu</u> <b>Subject Line:</b> B.Sc. SEM IV Differnetial equation $y + \sqrt{x^2 + y^2} dx - xdy = 0$ 2x + y - 3)dy = (x + 2y - 3)dx. x + y)(dx - dy) = dx + dy. or the following second order homogeneous linear quation for			
DIFF   EQU   Prof:   1.   2   3.   4.	<b>ERENTIAL</b> <b>ATION</b> <b>Vardan Parmar</b> Solve differential equation ( Solve differential equation ( Solve differential equation ( Find a Basic of sulution for $x^2y'' - xy' + y = 0, x > 0$	Mode of Submission: Email Email: <u>vardan.parmar@raiuniversity.edu</u> <b>Subject Line:</b> B.Sc. SEM IV Differnetial equation $y + \sqrt{x^2 + y^2} dx - xdy = 0$ 2x + y - 3)dy = (x + 2y - 3)dx. x + y)(dx - dy) = dx + dy. or the following second order homogeneous linear quation for 0 with one solution $y = x$ .			
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DIFF   EQU   Prof:   1.   2   3.   4.   5.   BOO   LAP   TRA	<b>ERENTIAL</b> ATION Vardan ParmarSolve differential equation (Solve differential equation (Solve differential equation (Solve differential equation (Find a Basic of sulution for $x^2y'' - xy' + y = 0, x >$ Obtain the Legendre's fun $(1 - x^2)y'' - 2xy' + 2y =$ LEAN ALGEBRA AND LACE NSFORMATION	Mode of Submission: Email Email: <u>vardan.parmar@raiuniversity.edu</u> <b>Subject Line:</b> B.Sc. SEM IV Differnetial equation $y + \sqrt{x^2 + y^2} dx - xdy = 0$ 2x + y - 3)dy = (x + 2y - 3)dx. x + y)(dx - dy) = dx + dy. or the following second order homogeneous linear quation for 0 with one solution $y = x$ . ction as a solution of = 0. Mode of Submission: Email Email: anjali.ladva@raiuniversity.edu <b>Subject Line:</b> B.Sc. SEM IV (BAALT)			
DIFF   EQU   Prof:   1.   2   3.   4.   5.   BOO   LAP   TRA   Prof:	<b>ERENTIAL</b> <b>ATION</b> <b>Vardan Parmar</b> Solve differential equation ( Solve differential equation ( Solve differential equation ( Find a Basic of sulution for $x^2y'' - xy' + y = 0, x >$ Obtain the Legendre's fun $(1 - x^2)y'' - 2xy' + 2y =$ <b>LEAN ALGEBRA AND</b> <b>LACE</b> <b>NSFORMATION</b> <b>Anjali Ladava</b>	Mode of Submission: Email Email: <u>vardan.parmar@raiuniversity.edu</u> <b>Subject Line:</b> B.Sc. SEM IV Differnetial equation $y + \sqrt{x^2 + y^2} dx - xdy = 0$ 2x + y - 3)dy = (x + 2y - 3)dx. x + y)(dx - dy) = dx + dy. or the following second order homogeneous linear quation for 0 with one solution $y = x$ . ction as a solution of = 0. Mode of Submission: Email Email: anjali.ladva@raiuniversity.edu <b>Subject Line:</b> B.Sc. SEM IV (BAALT)			
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DIFF EQU Prof: 1. 2 3. 4. 5. BOO LAP TRA Prof: 1. 2 3. 3.	<b>ERENTIAL</b> ATION Vardan ParmarSolve differential equation (Solve differential equation (Solve differential equation (Solve differential equation (Find a Basic of sulution fa $x^2y'' - xy' + y = 0, x >$ Obtain the Legendre's fun $(1 - x^2)y'' - 2xy' + 2y =$ <b>LEAN ALGEBRA AND</b> <b>LACE</b> <b>NSFORMATION</b> <b>Anjali Ladava</b> Draw logic gate and truth tal Find the laplace transformation $1.  \frac{s+2}{s^2-4s+13}$ Find the Laplace transformationSolve differential equation (	Mode of Submission: Email Email: vardan.parmar@raiuniversity.edu Subject Line: B.Sc. SEM IV Differnetial equation $y + \sqrt{x^2 + y^2} dx - xdy = 0$ 2x + y - 3)dy = (x + 2y - 3)dx. (x + y)(dx - dy) = dx + dy. For the following second order homogeneous linear quation for 0 with one solution $y = x$ . The following second order homogeneous linear quation for 0 with one solution $y = x$ . The following second order homogeneous linear quation for 0 with one solution $y = x$ . The following second order homogeneous linear quation for 0 with one solution of = 0. Mode of Submission: Email Email: anjali.ladva@raiuniversity.edu Subject Line: B.Sc. SEM IV (BAALT) Dele for "AND", "OR", "NOT", "NAND", "NOR". Attorn of $t^2e^t \sin 4t$ . In of:			



5.	Find the Laplace transform of:		
	1. $\sin 2t \sin 3t$ .		
	2. $\sin^2 3t$ .		

NOTE: After completing your assignments, contact your respective faculty member and submit the assignment for assessment.